



CITY OF CHULA VISTA
MULTIPLE SPECIES
CONSERVATION PROGRAM
2013 ANNUAL REPORT



City of Chula Vista
Multiple Species Conservation Program
Subarea Plan

2013 Annual Report

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City of Chula Vista
MSCP Subarea Plan 2013 Annual Report
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SECTION 1.0 INTRODUCTION

The 2013 Chula Vista MSCP annual report has been prepared in accordance with Section 5.5 (Preserve Assembly Accounting) of the City of Chula Vista (City) Multiple Species Conservation Program (MSCP) Subarea Plan, and Section 14.1 of the City's associated Implementing Agreement (IA). This report has been prepared based on recommendations provided by the U.S. Fish and Wildlife Services (USFWS) and formatted pursuant to guidelines outlined in the California Department of Fish and Wildlife's (CDFW) report entitled "*Reporting Requirements for NCCP/HCP's*." The 2013 annual report provides a summary of the habitat lost and gained during the 2013 calendar year and identifies measures taken by the City to maintain the goals and objectives of its Subarea Plan. Figure 1 illustrates the Chula Vista MSCP Planning Area and the Chula Vista Subarea in relation to areas that will be permanently conserved.

SECTION 2.0 PRESERVE ASSEMBLY

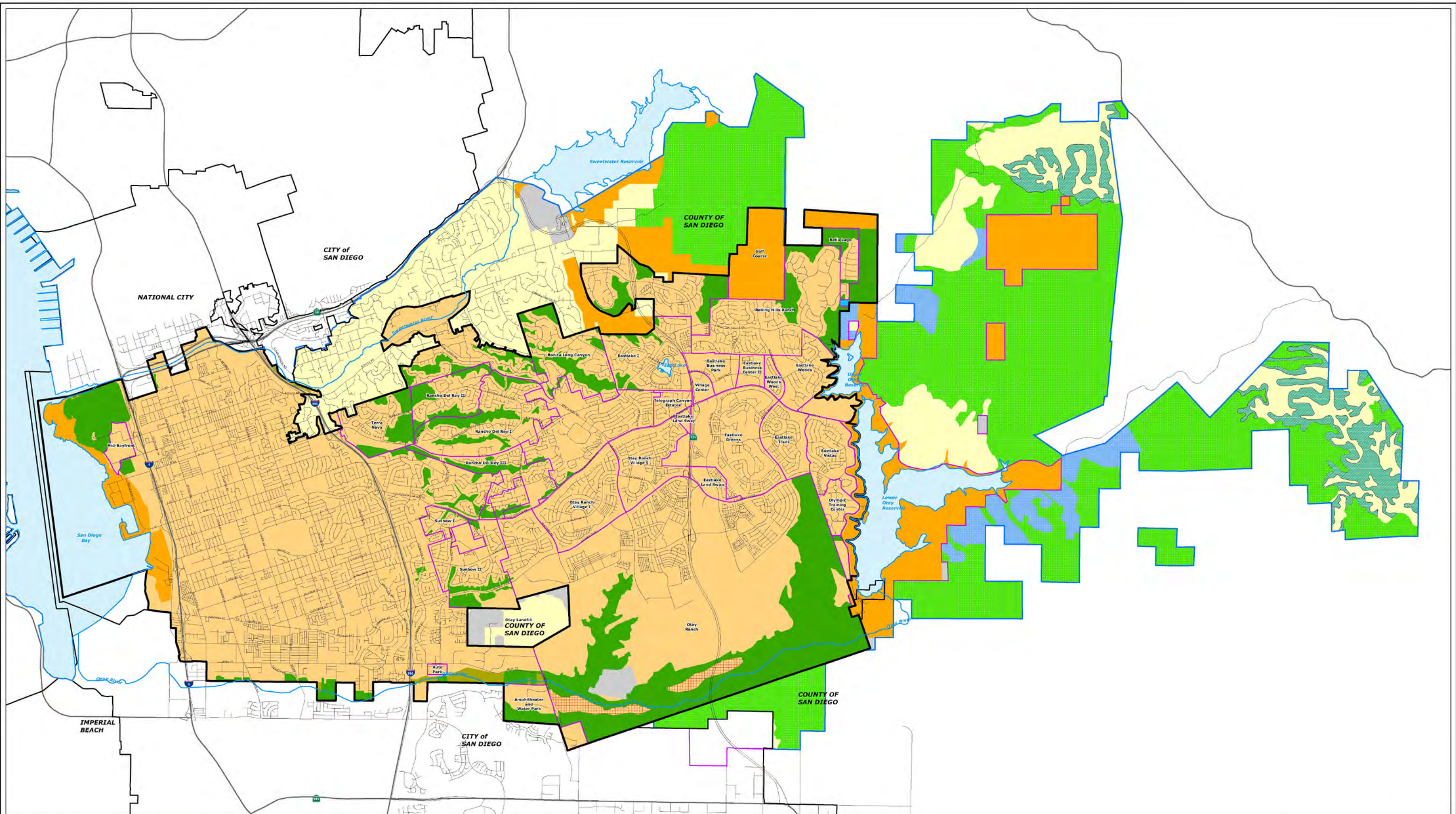
In accordance with Section 4.3 (Preserve Assembly by Local Jurisdictions) of the MSCP Subregional Plan, each local jurisdiction participating in the MSCP is responsible for taking the following actions to assemble the MSCP Preserve:

1. Contribute identified existing public lands to permanent habitat conservation and management;
2. Establish a regional funding source or alternative sources for the acquisition, management, monitoring, and program administration of the local jurisdictions share of the MSCP Preserve;
3. Acquire privately owned habitat in the MSCP Preserve from willing sellers when a regional funding source is established;
4. Manage and monitor habitat lands that are currently owned or newly acquired in the MSCP Preserve for habitat conservation, using the regional funding source; and
5. Review and approve conservation or development of privately owned habitat in accordance with local land use regulations, including zoning, biological and resource protection ordinances, and environmental review. Significant portions of the MSCP Preserve will be assembled using the local jurisdictions' normal land use planning and project approval process.

SECTION 2.1 BASELINE PRESERVE (JANUARY 2013)

Implementation of this Subarea Plan will ensure conservation and management of approximately 9,243 acres. Of this total, 4,993 acres will be located within the Chula Vista Subarea Plan boundary and will result in a Preserve that is managed by the City and/or a designated managing entity. An additional 4,250 acres will be conserved in the County of San Diego Multiple Habitat Planning Area (MHPA) outside the Subarea as a result of mitigation for development within the City.

The baseline Preserve within the Chula Vista Subarea Plan boundary at the beginning of the 2013 reporting period totaled 2,878 acres (Table 2.1 and Figure 2). This acreage includes all habitat gains reported from January 2005 through the end of the 2012 reporting period. Additional MSCP Preserve conservation outside the Chula Vista Subarea totaled 2,727 acres at the beginning of the 2013 reporting period (Table 2.2).



Legend

- | | | |
|-----------------------------------|--|--|
| Chula Vista Subarea Plan Boundary | 100% Conservation Area - Habitat Preserve | Planned Active Recreation Area - Subject to RMP Policies and OVRP Planning |
| Chula Vista MSCP Planning Area | 75 - 100% Conservation Area - Habitat Preserve | 100% Conservation Area - Habitat Preserve Outside City of Chula Vista |
| Major Projects Boundaries | Major Amendment Area | Major Amendment Area - Outside City of Chula Vista |
| Lakes/Reservoirs | Minor Amendment Area | Restricted/Limited Development Area |
| Development Area | Other Agency - Preserve Planning Efforts | Development Area Outside City of Chula Vista Subject to County Subarea Segment Plans |

Chula Vista MSCP Subarea Plan

FIGURE 1

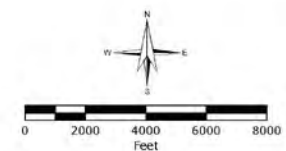
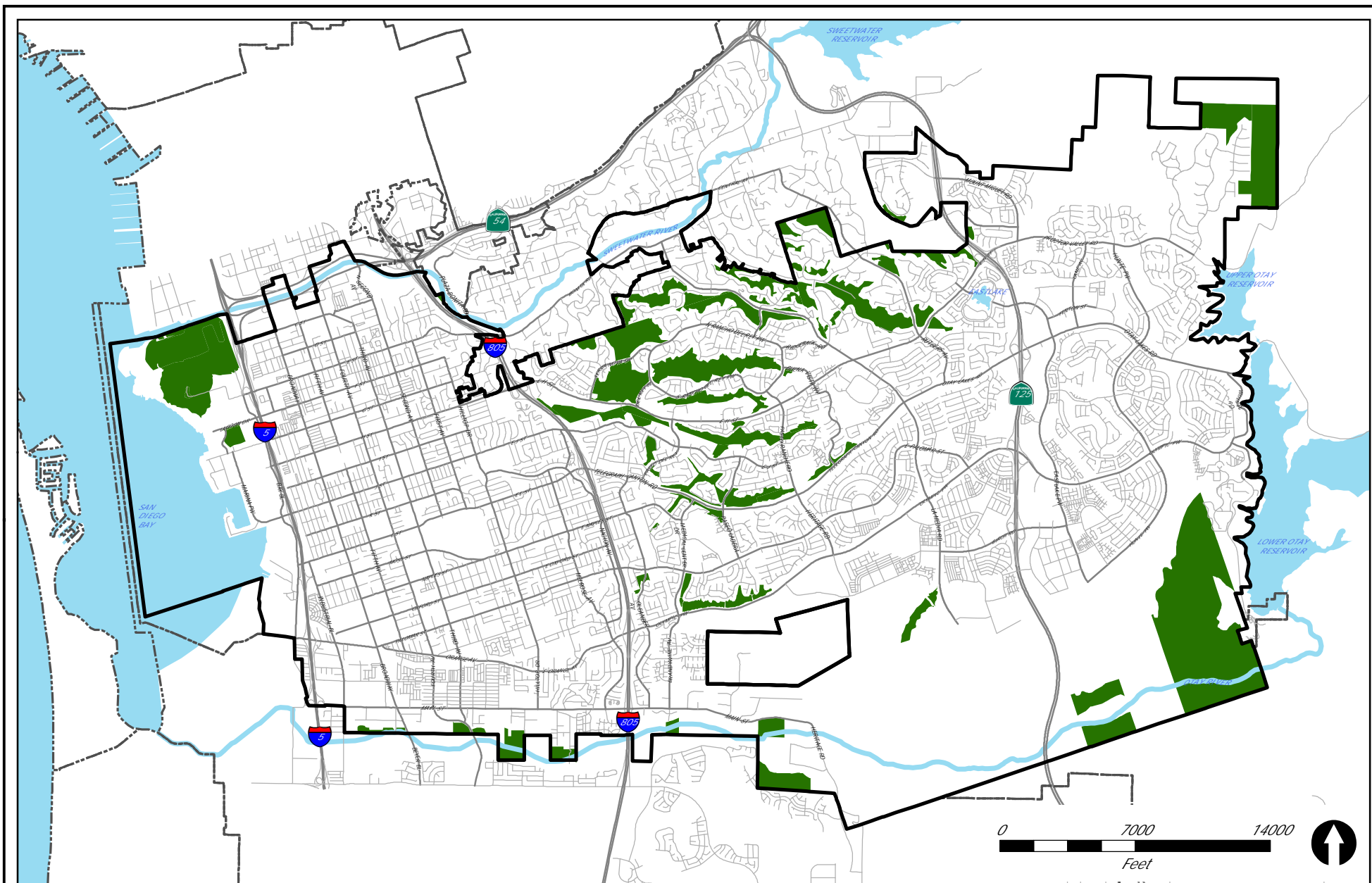


Table 2.1: Preserve Acreage Within Chula Vista MSCP Subarea Plan (January 2013)

Vegetation Communities	Total Acreages in Subarea	Obligated Conservation Acreages per IA	Preserve Acs ^a (January 2012)	2012 Preserve Gains ^b (December 2012)	Existing Preserve Acre ^c (January 2013)
Upland Habitats					
Coastal Sage Scrub	3,815	2,418	1551.7	6.0	1557.7
Maritime Succulent Scrub	293	190	85.5	7.0	92.5
Chaparral	28	28	27.9	-	27.9
Grassland (all types)	3,125	896	273.8	10.5	284.3
Oak Woodland	2	2	0	-	0
Eucalyptus Woodland	43	18	12.7	-	12.7
<i>Upland Subtotals</i>	<i>7,306</i>	<i>3,552</i>	<i>1951.6</i>	<i>-</i>	<i>1,975.1</i>
Wetlands					
Southern Coastal Salt Marsh	204	202	188.8	-	188.8
Freshwater/Alkali Marsh	16	14	3.7	0.5	4.2
Riparian Forest	10	10	9.8	-	9.8
Riparian/Tamarisk Scrub	604	594	109.1	1.0	110.1
Open Water/Freshwater	59	24	6.9	-	6.9
Disturbed Wetlands	28	15	4.2	-	4.2
Natural Flood Channel	159	146	115.9	-	115.9
<i>Wetland Subtotals</i>	<i>1,080</i>	<i>1,005</i>	<i>438.2</i>	<i>-</i>	<i>439.9</i>
Other/Non-Habitat					
Disturbed	845	352	182.5	5.0	187.5
Agriculture	6,192	62	25	-	25
Developed	15,288	22	241.3	-	241.3
Shallow Bays	1,322	0	9.2	-	9.2
Other Agencies	1,012	0	0	-	0
<i>Other Subtotal</i>	<i>24,659</i>	<i>436</i>	<i>456.8</i>	<i>-</i>	<i>463.0</i>
Total Acreages Within Subarea Plan Boundary^d	33,045	4,993	2,848	30	2,878
Notes:					
a. Based on 2011 year-end HabiTrak acreage calculations					
b. Vegetation communities and mapped acreages are based on 2012 baseline survey reports.					
c. Acreages generated by HabiTrak differ from the actual acreages reported by the City. Discrepancies are the result of inconsistent parcel/Preserve layers used between the City and CDFW.					
d. Acreages have been rounded and do not include pending gains.					

Table 2.2: Additional MSCP Preserve Contributions Outside Subarea Plan (January 2013)

Project	Estimated Preserve Contribution (Table 3-5 of CV SAP)	Conservation Status ¹ (January 2013)
Ranch Del Rey	360	360
Sunbow	65	65
Otay Ranch (City Contribution)	3,610	2,087
San Miguel Ranch (North Parcel)	166	166.72
Rolling Hills Ranch	49	40
Bella Lago (off-site)	10	-
Total Acreages Outside Subarea Plan Boundary	4,250	2,727
Notes: Conservation outside the Chula Vista Subarea (i.e., Chula Vista jurisdictional boundary) is not captured in the City's HabiTrak model. Contributions outside the Chula Vista Subarea are tracked separately by Chula Vista MSCP staff and reported through annual reports.		



MAP NOTE:
This map is intended for study only and should not be used for any other purpose. Information on this map is also subject to change (or revision) periodically. The City of Chula Vista does not guarantee the accuracy of information contained on this map and cautions against the use of this data in making land use decisions.

LEGEND

- City of Chula Vista MSCP Subarea Plan Boundary
- Baseline Preserve (Beginning Year 2013)

FIGURE 2
2013 BASELINE PRESERVE AREA

SECTION 3.0 CHULA VISTA 2013 MSCP STATUS UPDATE

The following discussion summarizes approved projects processed with Wildlife Agency Staff concurrence. A project summary along with a brief discussion highlighting the project's compliance with the City's MSCP Subarea Plan and project conditions of approval is provided below:

Section 3.1 Otay Valley Rock Quarry Preserve Boundary Adjustment

On September 24, 2010, the City conditionally approved an MSCP Boundary Adjustment prepared for the Otay Valley Rock Quarry in accordance with the procedures specified in Section 5.4.2 of the City's MSCP Subarea Plan and Section 5.4.2 of the MSCP Subregional Plan. The approval of the Boundary Adjustment was predicated on the Applicant's concurrence to implement and fulfill several additional conditions of approval imposed by the City and the Wildlife Agencies. A summary of the project's conditions of approval and status of implementation through the end of the 2013 reporting period is provided in Table 3.1 below.

Table 3.1: Otay Valley Quarry Conditions of Approval

Condition /Summary	Status
<u>Soil Testing:</u> Applicant shall perform soils testing to determine if ensure areas identified for habitat restoration contain appropriate soils for native restoration and/or if existing topsoil stockpiles are sufficient to augment restoration areas.	Complete. Based on the soil tests, soils suitable for native habitat restoration are present in the areas identified for habitat restoration on-site.
<u>Updated Biological Surveys:</u> Applicant shall perform updated biological surveys for variegated dudleya (Chula Vista MSCP Narrow Endemic Species) within the take areas during the detection period in the spring of 2011.	Complete. An updated survey was performed May of 2011. Based upon the survey results, variegated dudleya was not detected.
<u>Resource Salvage and Translocation Plan:</u> Applicant shall prepare and implement a Salvage and Translocation Plan for approximately 148 San Diego barrel cacti.	On-going. A Resource Salvage and Translocation Plan was reviewed and approved by the City. Cacti salvage and relocation was completed in November 2011 and included the translocation of 200 cacti. Based on the second year monitoring results, a total of 190 out of the 200 cacti translocated are surviving (Dudek & Associates, 2013).
<u>Land Conveyance:</u> Concurrent with the City's approval of any Reclamation Plan Amendment, the Applicant shall make an Irrevocable Offer of Dedication (IOD) of land to the Otay Ranch Preserve Owner/Manager (POM) at a ratio of 1.188 acres of Preserve land for every acre of land within the amended Reclamation Plan area.	In process - A Reclamation Plan Amendment was approved by the City in June 2011. In accordance with this condition, an IOD for approximately 90 acres of Preserve land has been prepared and is under review by the Otay Ranch Preserve Owner Manager (POM). Approval of IOD is anticipated summer of 2014 pending the Applicant's removal of all title report encumbrances.
<u>Funding for Long-term Land Management:</u> Applicant shall is required to annex the project area into within the Otay Ranch Community Facilities District No. 97-2 (CFD 97-2).	In process - The City is currently coordinating with the Applicant on annexing the expanded quarry area in to CFD 97-2. The anticipated completion date for annexation is summer of 2014.
<u>Habitat Restoration Plan:</u> Applicant to prepare and implement a Coastal Sage Scrub (CSS) Restoration Plan to restore 11.0 acres of disturbed and developed lands within the Preserve.	Pending - Pursuant to the timing of this condition, a plan will be submitted within 5- years from the City's approval of the Preserve Boundary Adjustment.

City MSCP staff will continue to update the Wildlife Agencies on the project's compliance with the requirements outlined in the City's conditional letter of approval.

SECTION 4.0 HABITAT GAIN AND LOSS

The results presented in this section of the report reflect the implementation of the City's MSCP Subarea Plan during the 2013 reporting period. The term "loss" or "take" is used to describe habitat that has been authorized for development activities. Habitat loss is accounted for at the time grading permits are issued. The term "gain" is used to describe habitat that has been dedicated in-fee title as Preserve and for which funding and Preserve Manager has been secured. The term "pending gain" is used to describe habitat that is currently secured through an Irrevocable Offer of Dedication (IOD) or similar mechanism, but has not been accepted into the Preserve for long-term management.

The Habitat Tracking Reporting (HabiTrak) software was used to track habitat gains against the conservation goal of 4,993-acres within the Chula Vista Subarea Plan Boundary. It is important to note that the geographical scope of HabiTrak is limited to the City's jurisdictional limits (i.e., Chula Vista Subarea Plan Boundary). Additional MSCP Preserve contributions outside the Chula Vista Subarea, as a result of development within the City, are reported through the City's annual report. It should be noted that the acreages calculated using the HabiTrak software differ slightly than the actual acreages approved for the project due to minor discrepancies in parcel boundaries and Preserve configuration (refer to Section 9.0 for additional information regarding these discrepancies).

Section 4.1 Proctor Valley North (82.4-acre gain)

Approximately 82 acres of MSCP Preserve was acquired in conjunction with the Otay Ranch Village 2 development. This conservation land is located outside of the Chula Vista Subarea within the County's MHPA, near Proctor Valley. Because of its location within the County's MHPA, the acreages associated with this property are reported as a Preserve contribution outside the City's Subarea Plan and not included in the HabiTrak calculations. Title of the property has been transferred to the Otay Ranch Preserve Owner/Manager (POM) for long-term management.

Section 4.2 Otay Ranch Millennia (189.2-acre gain)

Approximately 190 acres of MSCP Preserve was acquired in conjunction with the Otay Ranch Millennia development (Planning Area 12). This conservation land is located outside of the Chula Vista Subarea within the County's MHPA, south of Otay Valley. Because of its location within the County's MHPA, the acreages associated with this property are reported as a Preserve contribution outside the City's Subarea Plan and not included in the HabiTrak calculations. Title of the property has been transferred to the Otay Ranch POM for long-term management. The associated loss is discussed in Section 4.6 below.

Section 4.3 San Miguel Ranch (187.14-acre gain)

Pursuant to the Annexation Agreement between the Wildlife Agencies, City of Chula Vista, County of San Diego, and Trimark Development (Chula Vista MSCP, Appendix C), 187 acres of Preserve was transferred to the U.S. National Wildlife Refuge (NWR) for long-term management. This Preserve gain is within the City's Subarea Plan boundary and is included in the City's 2013 HabiTrak calculations.

Section 4.4 Rolling Hills Ranch (221.58-acre gain)

Approximately 221 acres of MSCP Preserve was acquired in conjunction with the Rolling Hills Ranch development. In addition to the 221 acres of MSCP Preserve, a 22-acre Tarplant Management Area (TMA) was also acquired by the City and will be managed for its natural resources. Pursuant to the Biological Opinion issued for this project, the 22-acre TMA was not intended for inclusion into the MSCP Preserve due to the disturbed nature of the site and lack of connectivity to the adjacent NWR. As such, the 22-acre TMA is not included in the 2013 habitat gains. The 221-acre Preserve has been transferred to the City for long-term management and is included in the 2013 HabiTrak calculations.

Section 4.5 Bella Lago (10-acre gain)

Approximately 10 acres of MSCP Preserve was acquired in conjunction with the Bella Lago development. In 2013, the developer (K. Hovnanian) successfully negotiated the transfer of this parcel to the NWR for long-term management. This conservation land is located outside of the Chula Vista Subarea within the County's MHPA. Because of its location within the County's MHPA, the acreages associated with this property are reported as a Preserve contribution outside the City's Subarea Plan and not included in the HabiTrak calculations.

Section 4.6 Otay Ranch Millennia (209-acre loss)

During the 2013 reporting period, the City issued a grading permit for the Otay Ranch Millennia project for the development of approximately 210 acres of former agricultural land. Loss of this habitat is within the City's Subarea Plan boundary and has been captured in the HabiTrak totals for the 2013 reporting period. It is important to note that within Otay Ranch, conveyance obligations established by the Otay Ranch GDP and Otay Ranch RMP creates a unique circumstance whereby conservation does not occur prior development grading. Conveyance obligations are satisfied prior to recordation of each final map, which generally follows grading operations. As described in Section 4.7.1 of this report, conveyance obligations within Otay Ranch are calculated based on a conveyance ratio of 1.188 acres of Preserve for each acre of development area (excluding common areas as defined in the RMP 2, pgs. 59-62). In accordance with the RMP 2, common use areas include, but are not limited to, local parks, public schools, arterials, and lands designated as public use areas. Thus, as it relates to reporting habitat loss and gains, habitat loss is calculated by determining the total acreage within a projects approved limits of grading at the time the grading permits is issued. Conversely, habitat gains are calculated based on a projects total developable acreage, which will differ slightly from the total acreages impacted by grading operations.

Section 4.7 Pending Gains

The term "pending gain" is used to describe habitat that is currently secured through an IOD or similar mechanism, but has not been formerly transferred/conveyed into the Preserve and/or for which a Preserve Manager has not been identified. A brief status of the City's pending gains is provided below.

Section 4.7.1 Otay Ranch

Otay Ranch is a Covered Project under the City's MSCP Subarea Plan. Within Otay Ranch, conveyance obligations established by the adopted Otay Ranch GDP and associated Otay Ranch RMP create a unique circumstance whereby losses occur at issuance of a grading permit and conveyance mitigation is not required until the subsequent recordation of a final map. Development projects within Otay Ranch are

required to dedicate conservation land as development occurs pursuant to individual project approvals and simultaneously with issuance of final map as required by binding tentative map conditions that run with the land.

The RMP conveyance obligations are calculated based on a conveyance ratio of 1.188 acres of Preserve for each acre of development area (excluding common areas as defined in the RMP 2). In accordance with the RMP, common use areas include, but are not limited to, local parks, public schools, arterials, and lands designated as public use areas. Thus, as it relates to reporting habitat loss and gains, habitat loss is calculated by determining the total acreage within a projects approved limits of grading at the time the grading permits is issued. Conversely, habitat gains are calculated based on a projects total developable acreage, which will differ slightly from the total acreages impacted by grading operations. Conveyances within the Otay Ranch Preserve are reported as a gain once a conservation area has been dedicated in fee title to the Otay Ranch Preserve/Owner Manager (POM).

Since the recordation of the first final map within the Otay Ranch Planning Component (Village 1, 1997), approximately 3,503 acres of Preserve have been secured in conjunction with development entitlements associated with Otay Ranch Villages 1, 2, 5, 6, 7, 11 and Planning Area 12 (Freeway Commercial/Millennia). Of this total, 3,162 acres have been conveyed in fee title to the POM. The remaining 341 acres are pending acceptance by the POM and are reported as a pending gain.

Section 4.7.2 Bella Lago

Bella Lago is a Covered Project under the City's Subarea Plan. Habitat conservation for this project consists of the on-site preservation of 86.5 acres of upland habitat with an additional off-site preservation of 10 acres of land containing a minimum of 210 Otay tarplants. To date, 75 acres of the on-site Preserve and the 10-acre off-site Preserve area have been accepted into the Preserve and transferred to the NWR for long-term management.

The remaining 11.5-acres of on-site Preserve have been secured through an IOD to the City that can be accepted in fee once all restoration activities have been completed and a long-term manager has been retained. At this time, the city anticipates that its Open Space Department will assume long-term management of this area once all restoration activities have been completed. Until the IOD has been accepted by the City, the remaining 11.5-acres of required on-site Preserve will be reported as pending gain.

Section 4.7.3 Rolling Hills Ranch

Rolling Hills Ranch is a Covered Project under the City's Subarea Plan. Habitat conservation for this project consists of 214 acres of on-site MSCP preservation with an additional 49 acres located off-site within the County MHPA. To date, 254 of the required conservation has been secured and incorporated into the Preserve for long-term management. The balance of the off-site mitigation requirement has been secured through an IOD to the City that can be accepted in fee once a long-term manager has been retained.

In 2013, McMillin continued to explore the possibility of transferring the management and maintenance responsibilities for the 10-acre off-site area located in Johnson Canyon to the Otay Ranch POM. However, the subject property is located within an Army Corps of Engineers (ACOE) designated Formerly Used Defense Site (FUDS) area associated with the former Brown Field Bombing Range. Based on the historical use of this area, ACOE has determined that additional investigations are required to determine what, if any, remediation actions need to occur in order to deem the site safe for public

access. Throughout 2013, the City engaged in discussions with ACOE, the County of San Diego, and McMillin regarding the future disposition of these areas. The goal of these conversations is to understanding the liabilities, indemnities and obligations under the context of long-term management including public access. Until the FUDS issue has been resolved and the IOD accepted by the City and/or POM, McMillin will continue to manage the property pursuant to the Rolling Hills Ranch ASMDs. In light of this, the 10 acres in Johnson Canyon will continue to be reported as pending gain.

Section 4.7.4 El Dorado Ridge

In April 2011, the City issued an HLIT Permit for the El Dorado Ridge Project (HLIT Permit 2011-01). In partial satisfaction off-site mitigation requirements for this project, the Permittee submitted an IOD for 5.5 acres of land located within the southern portion of the Otay Ranch Preserve. The City's acceptance of the land in fee title will not occur until the Permittee has completed all permit conditions including: resource salvage and translocation, established a long-term funding mechanism, and identified an appropriate land manager. Until the City accepts the land in fee title, the 5.5 acres will continue to be reported as a pending gain.

Section 4.8 Summary of Habitat Gains and Loss

At the end of 2013 reporting period, the City's contributions to the MSCP Preserve included 3,287 acres within the Subarea Plan Preserve (Figure 3), 3,009-acres within County MHPA, and 356-acres of pending gains. Based on the total cumulative gain (gains within and outside Subarea Plan boundary plus reported pending gains), the City has met 72% (6,652 acres) of its targeted 9,243-acres of Preserve. HabiTrak calculations summarizing habitat gains and losses during the 2013 reporting period are provided in Appendix A.

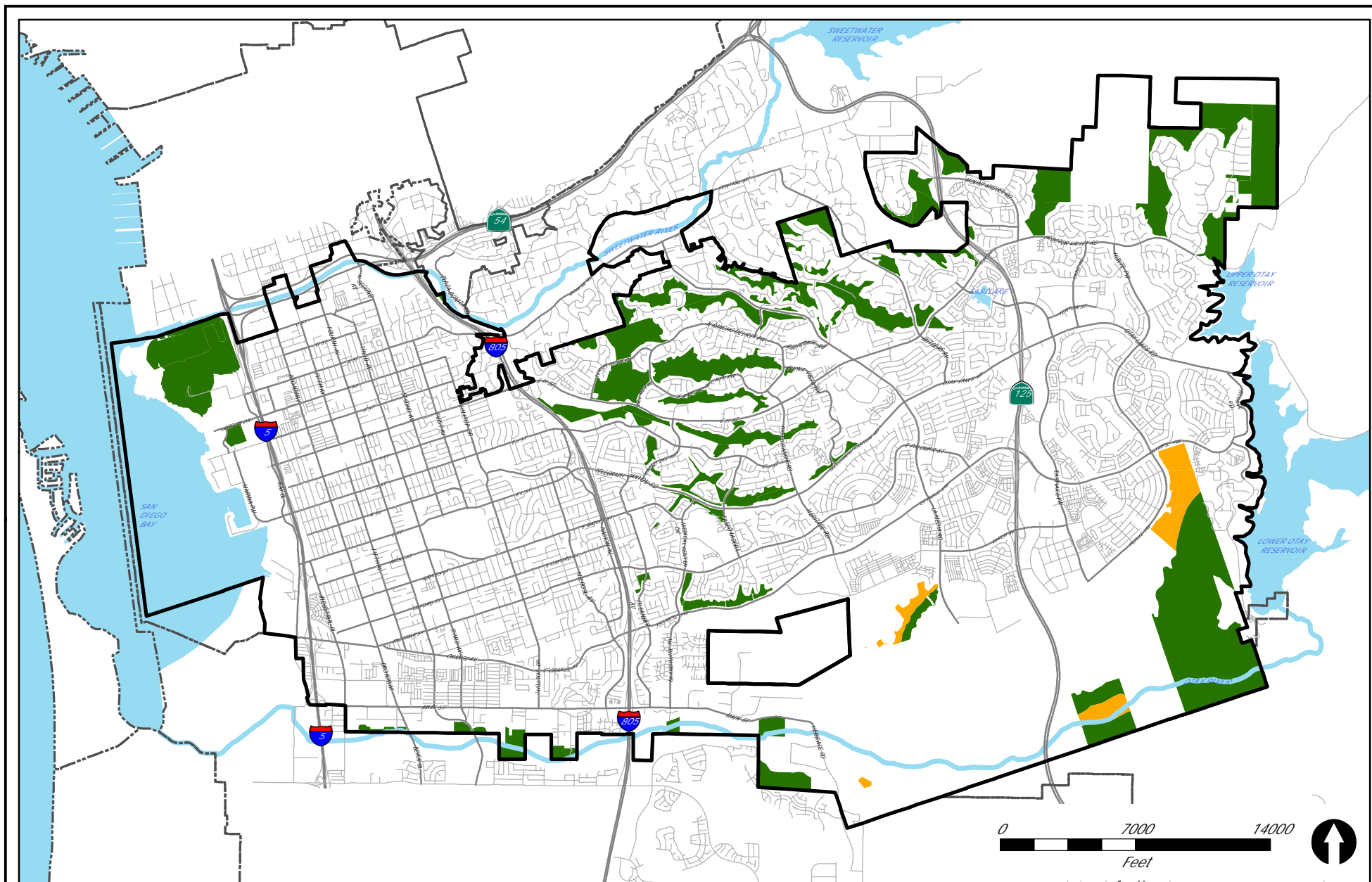
SECTION 5.0 PRESERVE MANAGEMENT AND MONITORING

Management and monitoring of the Preserve is an important element in its success, and to the overall success of the MSCP Subregional program. The management goal of the MSCP Subregional Plan including the City's Subarea Plan is to ensure that the biological values of natural resources are maintained or improved over time where land is preserved as part of the MSCP through acquisition, regulation, mitigation, or other means. The City is responsible for the maintenance and management of Preserve land owned in fee title by the City. Management to of lands set aside for inclusion into the Preserve but that have yet to be dedicated to the City is the responsibility of the underlying property owner.

Within the Otay Ranch, Preserve land is maintained and managed by the POM in accordance with the Otay Ranch RMP. Lastly, Federal and State agencies will maintain, manage, and monitor their land holdings, as well as those in which they acquire a legal interest.

Land located in the Preserve will be managed and maintained in accordance with specific management objectives identified in the City's Subarea Plan. These objectives are as follows:

1. To ensure the long-term viability and sustainability of native ecosystem function and natural processes throughout the Preserve.
2. To protect existing and restored biological resources from intense or disturbing activities within the Preserve while accommodating compatible uses.
3. To enhance and restore, where feasible, appropriate native plant associations and wildlife connections to adjoining habitat in order to provide viable wildlife and sensitive species habitat.



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LEGEND



City of Chula Vista MSCP
Subarea Plan Boundary



Baseline Preserve (December 2013)



Pending Gain

FIGURE 3

CURRENT PRESERVE STATUS
WITHIN MSCP SUBAREA

4. To facilitate monitoring of selected target species, habitats, and linkages in order to ensure long-term persistence of viable populations of priority plant and animal species and to ensure functional habitats and linkages for those species.

Each area of the City's Preserve is unique in terms of existing conditions, Preserve configuration, ownership of land, the existence and location of sensitive species, and management needs. The City's Subarea Plan divides the Preserve into three distinct Preserve Management Areas (PMAs) including the Central City PMA, the North City PMA, and the Otay Ranch PMA (refer to Figure 4). A summary of the management and monitoring activities performed during the 2013 reporting period is provided below.

Section 5.1 Central City PMA

Section 5.1.1 Cactus Wren Habitat Restoration Grant (Rice Canyon)

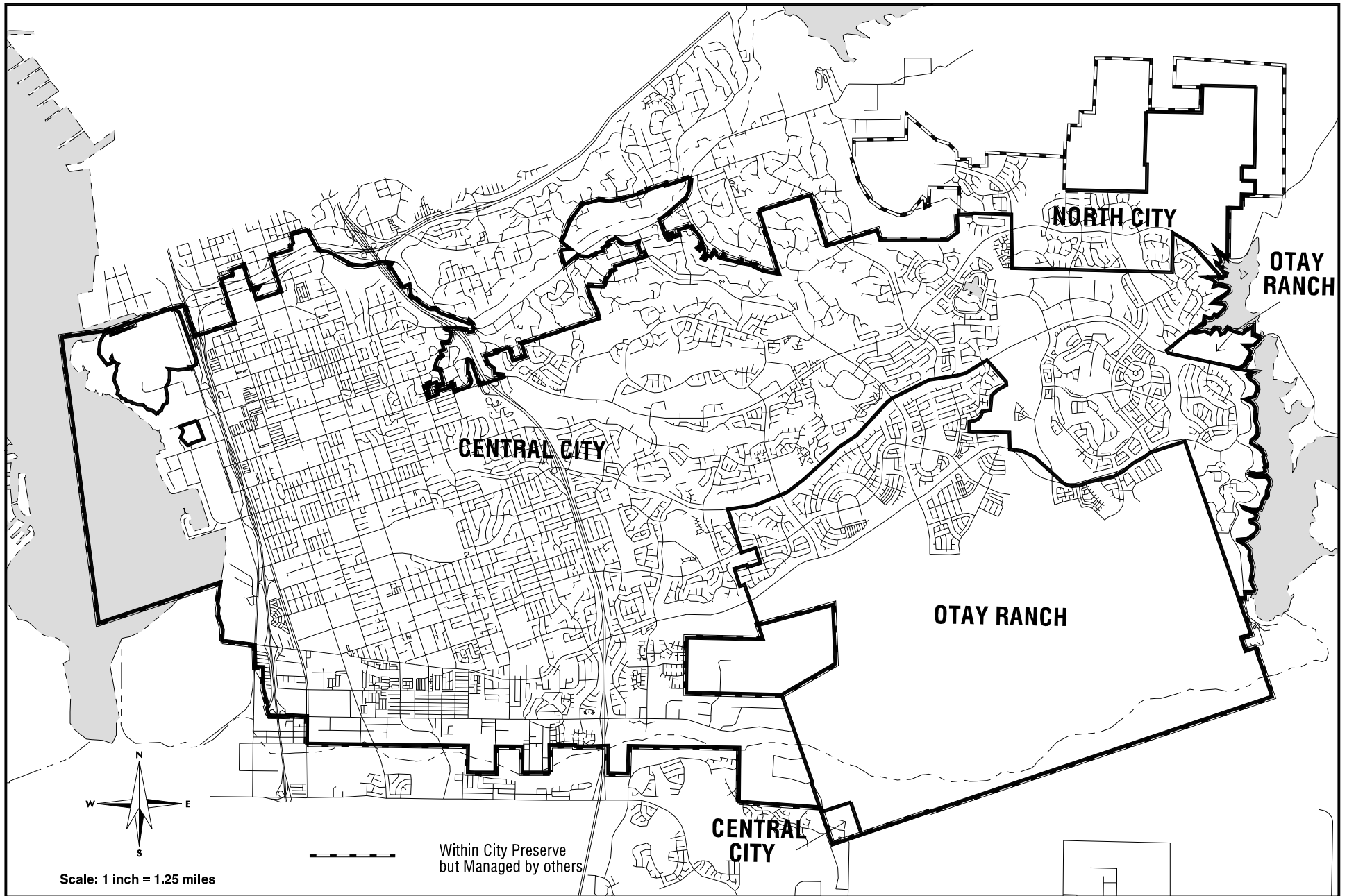
In fall of 2009 the City initiated a five-year land management program to restore and enhance degraded habitat for the coastal cactus wren within Rice Canyon, Central City Preserve (refer to Figure 5). Funding for this project is provided through SANDAG's TransNet Environmental Mitigation Program (EMP). The City's grant addresses the immediate need of coastal cactus wren within Rice Canyon where loss and degradation of existing wren habitat is occurring due to increase of invasive plant species, drought, vegetation succession processes, and unauthorized public access. Tasks performed during the 2013 reporting period included vegetation monitoring, repeat bird counts, maintenance to control non-native weeds and replanting of damaged areas. A summary of the management and monitoring activities performed in 2013 is provided below.

Vegetation Monitoring

Vegetation patch sampling was performed using the relevé method. Treated vegetation patches greater than 0.10 acre were sampled. All plant species occurring in each patch were recorded, and the cover of species was estimated. A total of 26 vegetation treatment areas were sampled by project biologists in June 2013. Twenty of the vegetation study plots were located at shrub thinning sites, and six were located at weed dethatching areas. The results of the vegetation monitoring are summarized below.

Despite below average rainfall, due to the absence of significant weed competition, cactus cuttings and existing cholla patches continued to expand in size during Year 4 of the grant project. As weed cover and competition has been reduced, more water has become available for native plant growth. Quantitative data show that the cover of cholla at the shrub thinning sites increased about 6 percent since 2010, while the average cover of cholla at the dethatching sites increased about 9.5 percent. The most noticeable change in the cholla at the dethatching areas was the increase in height of the plants. The percentage of cholla that were 1-3 feet tall increased from just 4 percent in 2010 to nearly 44 percent in 2013. The percentage of cholla over three feet tall increased from 5 percent in 2010 to over 20 percent in 2013. In addition, the average cover of cholla relative to the total plant cover at the dethatching sites increased from 50 percent in 2010 to over 59 percent in 2013.

As part of the maintenance program, small amounts of native annual seed have been collected and redistributed in dethatching areas that have had little native annual cover. The increased native annual cover will support a greater diversity of insect species, which will in turn provide potential food sources for cactus wrens that often forage on the ground.



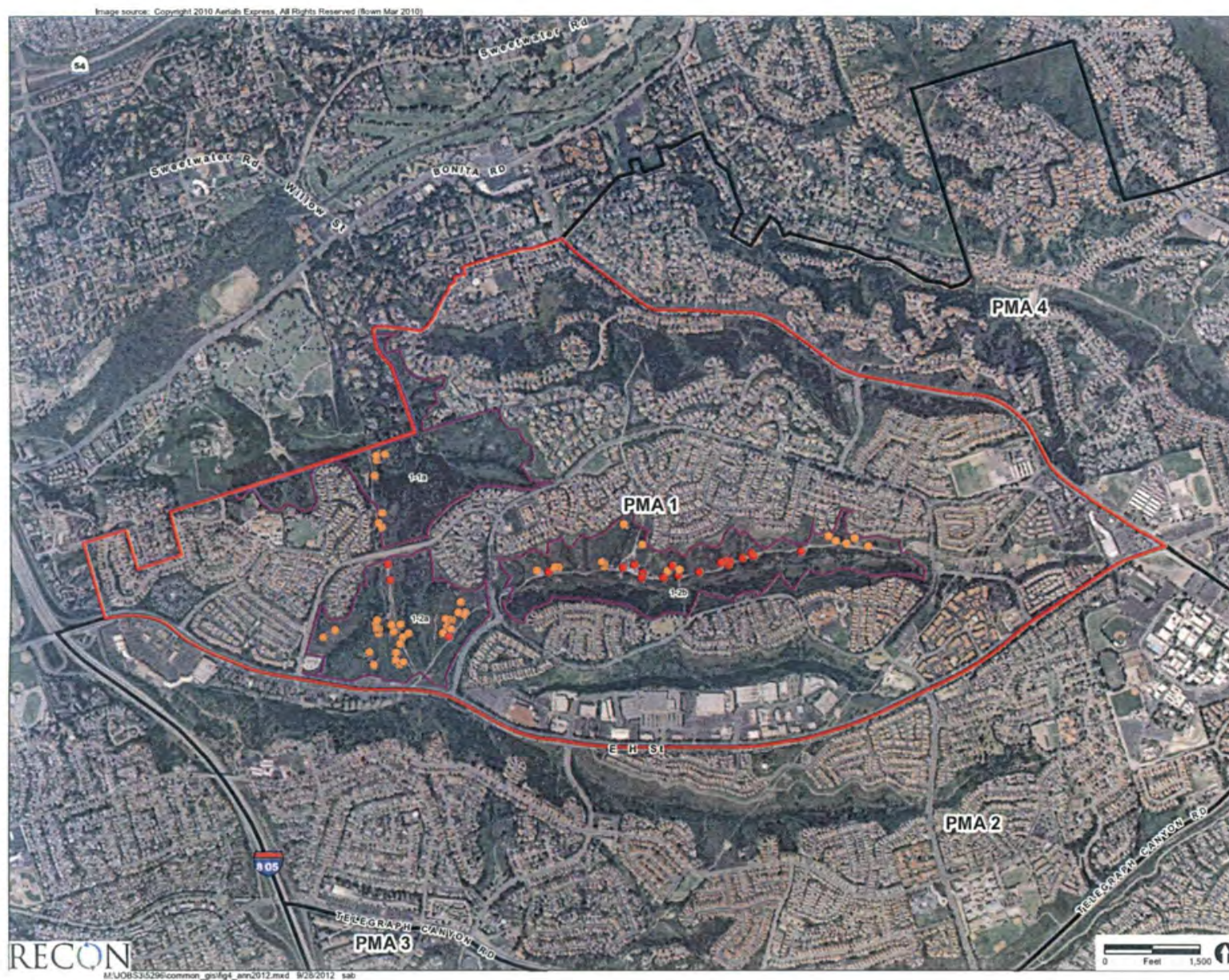
GEOGRAPHIC INFORMATION SYSTEM

/projects/planning/mscp/finalreport/pma.aml

Preserve Management Areas

**FIGURE
4**

Plot created: January 26, 2004



Preserve Management Areas

- PMA 1
- Other PMAs
- PMA Subunits
- Dethatch Areas
- Cut Areas

FIGURE 5

Cactus Wren Habitat Restoration
Central City Preserve – Rice Canyon
CCV / SANDAG Grant #5001130

Bird Point Count Results

Repeat bird point counts were conducted at 26 stations. Based on the results, 23 species of birds were detected during the 2013-point count monitoring compared to 14 species detected in 2010 and 15 species detected during the initial 2009 pre-implementation point counts. No coastal cactus wren or active wren nests were detected during the 2013 surveys.

Weed Control

Due to the continued maintenance efforts, weed cover at the shrub clearing and dethatching sites remained low in spring 2013. The average non-native cover at the shrub clearing sites was 1.1 percent in 2013. The relative percentage of weeds at the shrub thinning sites also remained low at 3.6 percent in 2013. At the dethatching sites, non-native cover was 1.6 percent in 2013. The relative percentage of weeds at the dethatching sites also remained low at 8.4 percent in 2013. These numbers indicate that weed control efforts have been successful and are continuing to maintain low levels of nonnative cover.

Future Tasks

In 2013, weeds will continue to be controlled, as needed, to prevent seed set. Vegetation sampling and bird point counts will be repeated in the spring of 2013.

Section 5.1.2 Otay Tarplant and San Diego Thornmint Restoration Grant

In May 2011, the City initiated a 3-year land management program to restore and enhance approximately 15 acres of land supporting the Otay tarplant and San Diego thornmint within the Central City PMA (refer to Figure 6). The land management activities offered through this program are essential to sustain existing populations of Otay tarplant and San Diego thornmint within the Central City PMA. Funding for this project is provided through SANDAG's TransNet EMP. A summary of the management activities and monitoring results performed between September 2012 to August 2013 are described below:

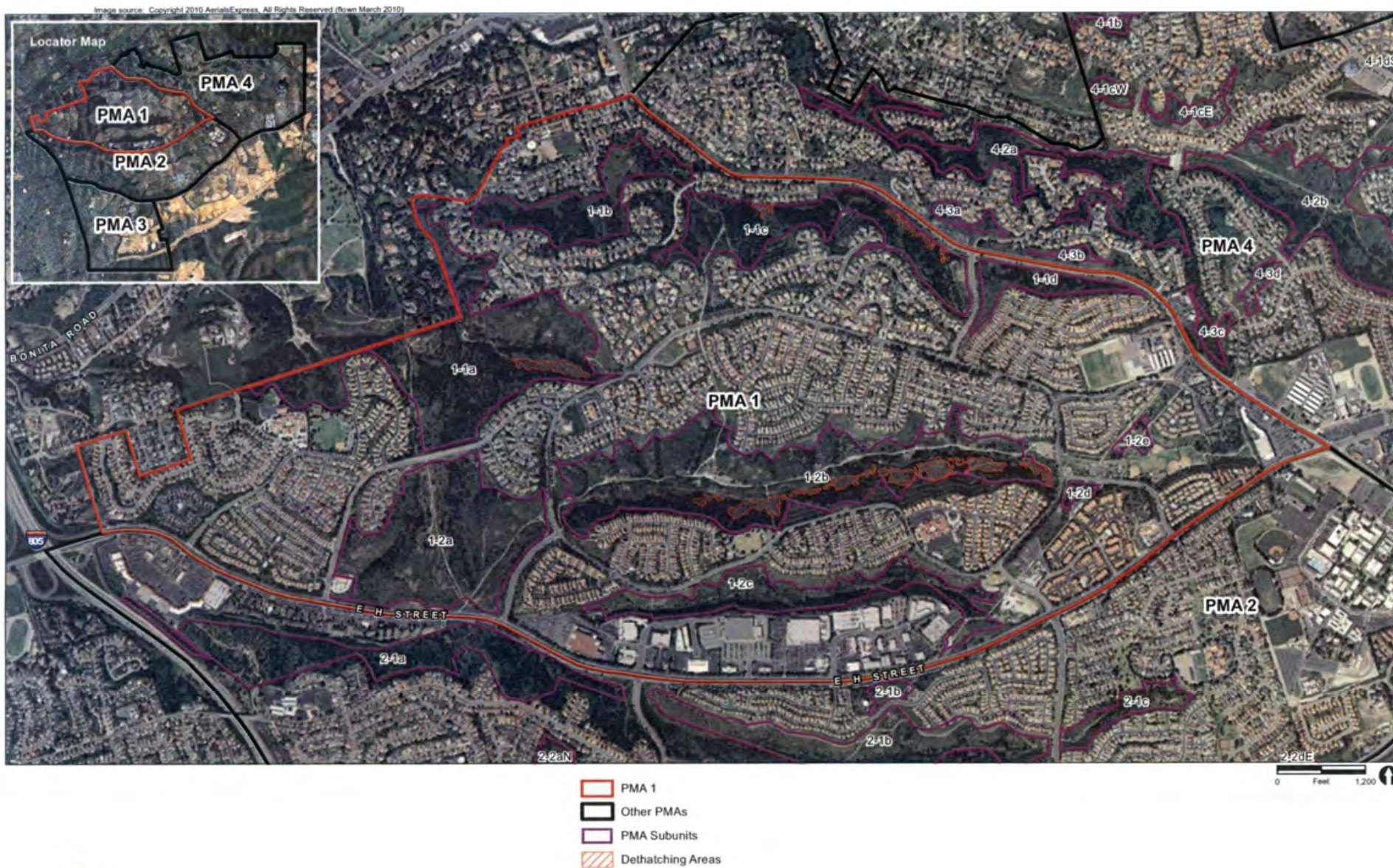
Seed Collection/Redistribution

Fall 2012 Seed Dispersal

In order to start new populations of San Diego thornmint, a portion of the seed collected in 2011–12 was dispersed by qualified biologists in early December 2012 at seven new locations in PMA subunits 1-2b, 1-1a, and 1-1c. After significant rains, San Diego thornmint seeding areas were monitored to determine if germination had occurred, observe the health of the plants, and determine when weeding of the seeded plots needed to be performed. The newly germinated thornmint seedlings were visible in January 2013 after the heavy rains that occurred in December 2012.

2013 Seed Collection and Dispersal

Germination, seed development, and overall health of Otay tarplant and San Diego thornmint were monitored during the site visits to determine the correct timing for seed collection. In May 2013, qualified biologists collected San Diego thornmint seed for redistribution in the fall of 2013. As a standard conservation measure, no more than 5 percent of the total Otay tarplant and San Diego thornmint seed crop was collected. In August 2013, additional Otay tarplant seed was collected and dispersed. Other previously collected native plant seed including western blue-eyed-grass, osmadenia, purple needlegrass, foothill needlegrass, variegated dudleya, and shooting star were redistributed in PMA subunits 1-1a and 1-2b.



RECON

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FIGURE 6

Otay Tarplant & San Diego Thornmint Restoration
Central City Preserve - PMA 1
CCV / SANDAG Grant #5001590

Weed Control

Two general methods of weed treatment were conducted in the restoration and enhancement areas. In areas occupied by natural populations of San Diego thornmint, only dethatching by weed whips and thatch removal was conducted. In areas that had Otay tarplant only (with no thornmint) dethatching and spot spraying was done. In some areas where there were high concentrations of native bulbs, weed whips were used to cut non-natives around the bulbs to avoid spraying those areas. Transline© was used to control the artichoke thistle, and Prosecutor was used to control all other weed species.

Comparing the 2013 results to 2012 (Year 1) data, non-native cover in the dethatch and spray areas decreased from 26 percent absolute cover in 2012 to 18 percent in 2013. Relative cover of non-natives also decreased in the dethatch and spray areas, from 62 percent in 2012 to 52 percent in 2013. Native cover increased from 15 percent absolute cover in 2012 to 17 percent in 2013, and the relative cover of natives also increased from 37 percent in 2012 to 48 percent in 2013.

For the areas occupied by San Diego thornmint that were dethatched only, non-native cover also decreased. In 2012 absolute non-native cover was 39 percent and in 2013 it was 28 percent. Absolute native cover increased during that same time period from 24 percent in 2012 to 29 percent in 2013. The relevé results indicate that continued progress has been made on weed control during the second year of the project. It is anticipated that native annual cover will continue to increase as seeds have now been dispersed into treatment areas.

Otay Tarplant and San Diego Thornmint Population Monitoring

The results of the 2011 and 2012 population counts by PMA subunit are summarized in Table 5.1. The baseline population estimate conducted prior to implementation in 2011 showed a total of approximately 40,930 Otay tarplant, 8,542 San Diego thornmint, and 15 variegated dudleya individuals. San Diego thornmint and variegated dudleya were only observed in PMA subunit 1-2b (Rice Canyon). Otay tarplant was found in all three PMA subunits (1-1a, 1-1c and 1-2b).

Table 5.1: Population Estimates - Otay Tarplant and San Diego Thornmint Restoration

Species	PMA 1-1a	PMA 1-1c	PMA 1-2b	Total
2011 Population Estimates				
Otay tarplant	7,107	92	33,731	40,930
San Diego thornmint	0	0	8,542	8,542
Variegated dudleya	0	0	15	15
2012 Population Estimates				
Otay tarplant	11,930	297	125,323	137,550
San Diego thornmint	476*	140*	32,200	32,816
Variegated dudleya	0	0	75	75
2013 Population Estimates				
Otay tarplant	19,817	1,960	132,423	154,201
San Diego thornmint	322	350	12,568	13,240
Variegated dudleya	0	0	1,127	1,127

*Introduced population

After implementation of the dethatching and two years of the follow up spraying program, there has been an increase of 113,271 Otay tarplant individuals between 2011 and 2013. In PMA 1-1a, a total of 7,107 individuals were estimated in 2011, and 19,817 individuals were estimated in 2013. In PMA 1-1c, total of 92 individuals were estimated in 2011, and 1,961 individuals were estimated in 2013. In PMA 1-2b, a total of 33,731 individuals were estimated in 2011, and 132,423 individuals were estimated in 2013. These increases in population numbers from the 2011 baseline condition occurred despite below average rainfall in 2012–13. Variegated dudleya and San Diego thornmint numbers have also increased from the baseline condition. There were an estimated 15 Variegated dudleya plants in 2011 and in 2013 the number of estimated dudleya has risen to 1,127. Similarly, there were an estimated 8,542 San Diego thornmint plants in 2011 and in 2013 that number has risen to over 13,000.

Native Grass Establishment

Approximately 6,000 purple needlegrass plants were planted early January 2013. The rains that occurred after the purple needlegrass individuals were planted enabled the plants to become established in the native soil. Although herbivory was noted on many of the planted grasses, qualitative observations of the grass during the growing season indicated that the plants were responding to the herbivory by growing new shoots.

Future Tasks

Non-natives will continue to be controlled in Year 3. Vegetation sampling and Otay tarplant, San Diego thornmint and variegated dudleya population estimates will be repeated in the spring of 2014.

Section 5.1.3 General Central City Preserve Maintenance Activities

In 2013, the City's Open Space Division of the Department of Public Works continued to implement Priority I general maintenance tasks within or adjacent to the Central City Preserve. Priority 2 maintenance tasks are implemented to the extent that funding is available.

As identified in the City's MSCP Subarea Plan, Priority I general maintenance tasks consists of the following:

- Removal of trash, debris, and other solid waste;
- Maintenance of trails and fences;
- Implementation of security programs to enforce “no trespassing” rules, curtail illegal activities and activities that may degrade resources, such as grazing, shooting, illegal planting, dumping, and off-road vehicle traffic; and
- Limited weeding along Preserve/urban interfaces.

Section 5.2 North City PMA

Section 5.2.1 Bella Lago

In 2013, the developer continued to provide short-term management of the remaining 11.5-acre on-site open space Preserve areas in accordance with the project's ASMDs. Tasks completed during the 2013 reporting period included: invasives removal, trash/litter removal, restoration and control of unauthorized access into the Preserve. The developer will continue to implement short-term management tasks until an appropriate long-term manager has been identified and the lands have been accepted by the City into the Chula Vista MSCP Preserve.

Section 5.2.2 Rolling Hills Ranch

In 2013, the City accepted 221-acres of Preserve land in conjunction with the Rolling Hills Ranch Development and selected HRS, Inc. to serve as the Preserve steward. A work plan is being drafted which will implement the management and monitoring tasks in accordance with the Rolling Hills Ranch Preserve ASMDs. Long-term management activities will begin spring of 2014 with updated baseline surveys, rare plant and gnatcatcher surveys (if feasible), access control, and weed abatement.

Section 5.3 Otay Ranch PMA

The City and County together working as the POM are responsible for implementing the RMP management and monitoring strategies within the Otay Ranch Preserve. Specifically, the Otay Ranch RMP provides guidelines for the management and monitoring of the Otay Ranch Preserve and establishes conservation goals and restoration guidelines. The following summarizes work performed by the Preserve Steward/Biologist and POM administrative staff during the 2013 reporting period.

Section 5.3.1 Preserve Steward/Biologist Update

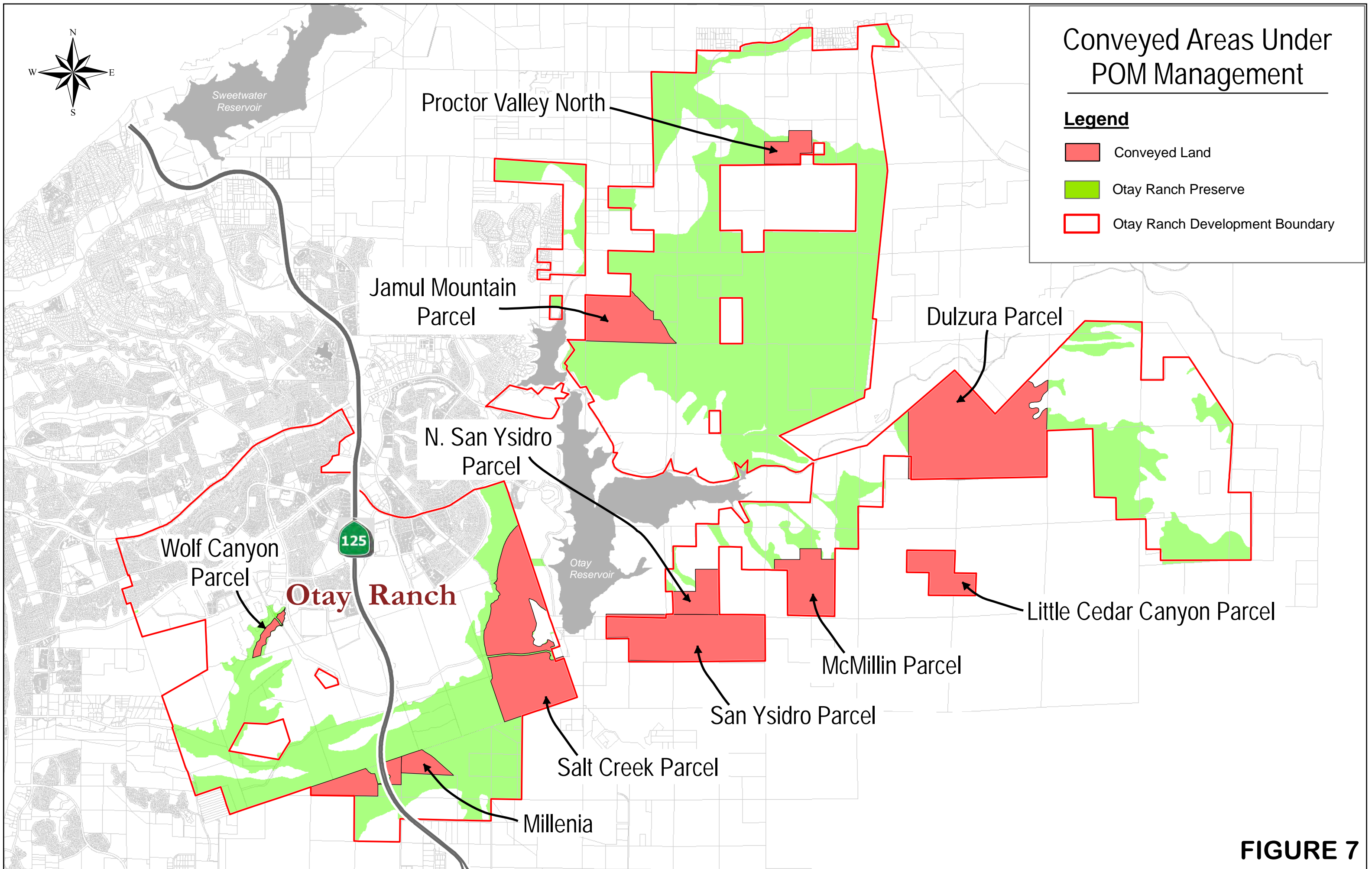
The POM has retained RECON to serve as the Preserve Steward/Biologist (PSB) to manage and monitor the biological resources within the Preserve in accordance with the approved Otay Ranch RMP. Currently lands under active management total 3,200 acres (Figure 7). Tasks performed by the PSB during the 2013 reporting period included:

Baseline Surveys

During spring 2013, the PSB conducted surveys to gather baseline biological information at the Wolf Canyon parcel and Proctor Valley (North) parcel. The surveys consisted of vegetation mapping, general plant and wildlife surveys, and photographic monitoring. Sensitive species were observed incidentally, and suitable habitat for sensitive wildlife species was evaluated.

Quino Checkerspot Butterfly Surveys

A QCB habitat assessment and five adult flight surveys were conducted at the Formerly Used Defense Site (FUDS) within the Salt Creek parcels between March 11, 2013 and April 11, 2013. The habitat quality (high, moderate, or low) was determined based on presence and density of host and nectar plants, physical characteristics of the habitat (slope, vegetation density, and soil type), invasive species, and proximity to previously known QCB observations. Areas considered to have the least probability for QCB to occur were excluded from the QCB surveys. While these areas may be marginally suitable for the QCB, they were not considered appropriate for the purposes of this survey. During adult flight surveys, habitat quality, QCB observations, and host plant occurrences (dotseed plantain, purple owl's clover, and thread-leaved bird's beak) were recorded and mapped. Incidental butterfly observations were also recorded. Survey methods followed those described in the USFWS protocol. Based on the survey results, Two adult QCB were observed during protocol surveys and two additional QCB were incidentally observed during management activities outside the protocol surveys.



Least Bell's Vireo and Yellow-billed Cuckoo Surveys

Eight LBVI presence/absence surveys and nine nest monitoring visits were conducted by Kevin Clark (subcontractor; San Diego Natural History Museum [SDNHM]) at Salt Creek between April 12, 2013 and July 9, 2013 following the survey methods described in the USFWS protocol. Two surveys for YBCU were conducted on July 23, 2013 and August 28, 2013 following the survey methods described in the Southern Sierra Research Station's protocol. The results of these surveys are summarized below:

- A total of sixteen male least Bell's vireos (two transient unpaired males, and fourteen paired males) were detected during presence/absence surveys. The least Bell's vireos were found in two general areas. Two pairs were detected at the northern end of upper Salt Creek and the remaining vireos were detected in the Otay River and adjacent upland habitats.
- A total of 18 least Bell's vireo nests were observed. Of these, none were parasitized. Least Bell's vireo nest parasitism by brown-headed cowbirds decreased from 45 percent in 2011 (pre-BHCO trapping) and 36 percent in 2012 (year 1 of BHCO trapping) to 0 percent in 2013 (year 2 of BHCO trapping).
- 38 fledgling least Bell's vireos were produced or 2.7 fledglings per pair.
- The high productivity of least Bell's vireo at the Salt Creek parcels has resulted in the formation of a local source population for other sites in the region.
- No yellow-billed cuckoos were observed or detected during the focused surveys.

Brown-headed Cowbird Trapping

Kevin Clark monitored two BHCO traps installed at the Salt Creek parcels from April 1, 2013 through July 2, 2013. The traps were placed near known least Bell's vireo nesting sites. Both traps were located along the Otay River. A total of 9 brown-headed cowbirds were captured within the Salt Creek parcels, including 4 males and 5 females.

Focused Rare Plant Surveys

Focused rare (sensitive) plant surveys were conducted at the Dulzura, Northern San Ysidro, Little Cedar Canyon, Jamul Mountains, and McMillin parcels, and within the Formerly Used Defense Site within the Salt Creek parcels between February and June 2013. Rare plant populations previously undetected or found during the baseline surveys were mapped in greater detail to document the full distribution of the species. Because of large number of species detected during the surveys, a complete listing of all observed species is not appropriate for this report. However, the survey results can be provided under a separate cover upon request.

Fairy Shrimp Surveys

Wet season fairy shrimp surveys started on December 20, 2012 at the Salt Creek parcels, one week after initial inundation. Surveys were conducted in ponded areas within the Salt Creek parcels using the methods described in the USFWS protocol (USFWS 1996). The results of these surveys are summarized below:

- Twenty-two representative ponded areas were sampled during the surveys. The estimated maximum capacity for the ponded areas ranges in size from approximately 28 square feet to 4,613 square feet, totaling approximately 13,636 square feet. Each of the ponded areas was observed with standing water during at least two survey visits, and a majority of the ponded areas held water throughout the survey period.
- Federally endangered San Diego fairy shrimp (*Branchinecta sandiegonensis*) were identified in 16 of the 22 ponded areas surveyed. Versatile fairy shrimp were identified in 7 of the 22 ponded areas surveyed. Only immature fairy shrimp that could not be identified to species were observed in one of the surveyed ponded areas.

Vernal Pool Plant Surveys

Vernal pool plant surveys were performed from March 2013 through April 2013 on 39 ponded areas (man-made road ruts and swales) in the Salt Creek parcels. A total of 10 vernal pool plant species and 24 non-vernal pool plant species were observed within the ponded areas. Of these, 10 species total, including 4 vernal pool plant species, had not been previously documented within the parcel set.

Access Control

Fencing and signs were installed at the Salt Creek and San Ysidro parcels to limit damage to sensitive habitat from unauthorized vehicle use. Fencing and sign installation is summarized below:

San Ysidro

- Approximately 300 linear feet of three-strand barbless wire t-post fencing was installed to protect sensitive habitat from off-road vehicle use.
- Two sensitive habitat/no trespassing signs were installed in areas where unauthorized access is becoming an issue.

Salt Creek

- Approximately 1,700 linear feet of t-post barbless wire fencing was installed at the Salt Creek parcels to protect sensitive habitat in the southern portion of the parcel from unauthorized vehicle use.
- Twenty Sensitive Habitat/No Trespassing-signs were installed at the Salt Creek parcels along roads coming in and out of the parcel.

Vegetation Treatment/Removal

Vegetation treatment and removal activities were performed within the Salt Creek San Ysidro, and Litter Cedar Canyon parcels. A summary of these activities is provided below:

- Non-native plants were treated with herbicide within approximately 8 acres of coastal cactus wren habitat within the Salt Creek parcels.
- Stinkwort was treated with herbicide and later removed by hand from approximately 2 acres within the Salt Creek parcels.
- Sparsely scattered stinkwort was removed from approximately 3 acres from the drainage within the San Ysidro parcels and 1.5 acres from the drainage within the Northern San Ysidro parcel.
- Twenty-one dead stalks of stinkwort were observed within the drainage of Little Cedar Canyon parcels. These locations will be revisited in the future to remove any seedlings that may be present.

In 2013, the PSB will continue to implement basic stewardship and conduct biological surveys and on-going monitoring in accordance with the goals and objectives of the RMP.

Section 5.3.2 Cactus Wren Habitat Restoration Grant – Salt Creek

The City was awarded approximately \$200,000 through SANDAG's TransNet EMP to implement a multi-year species-specific management program focused on restoring approximately 15 acres of degraded habitat for the coastal cactus wren within the Otay Ranch Preserve (refer to Figure 8). Tasks performed during the 2013 reporting period included vegetation monitoring, point count surveys, weed control, and public outreach. A summary of the grant activities performed in 2013 is provided below.

Vegetation Monitoring

The cactus cuttings showed their first sign of new growth in mid-January, as new shoots began to appear. Similarly, the taller cholla that were planted also began to show new growth in the spring. Rains tapered off in mid-March, and dry and warmer weather eventually stopped the new stem growth from expanding further, but the plants will be capable of good growth in the future with established root systems.

Bird Point Count Results

Focused spring surveys were conducted during May 2013 at six survey sites where restoration had occurred to support this species. Based on the results, 20 species of birds were detected within the six restoration areas during the coastal cactus wren survey. However, no coastal cactus wrens or nests were detected during the fall or spring surveys. Cactus wren nests had been incidentally observed in the vicinity of the project in 2010.




-  City of Chula Vista MSCP
-  Target Restoration Area
-  Potential Restoration Areas
-  Active Restoration Areas (Not a Part)

FIGURE 8



**Cactus Wren Habitat Restoration
Otay Ranch Preserve - Salt Creek
CCV / SANDAG Grant # 5001970**

Weed Control

Because of intensive maintenance efforts, weed cover at the restoration and enhancement sites was relatively low across the six sites at an average of 11 percent. Multiple spray visits were effective at controlling weed growth. Spraying focused around the newly planted cholla patches, but all areas within the six restoration and enhancement sites were treated. By controlling non-native weeds, more water becomes available to the newly rooted cactus cuttings.

Public Outreach/Awareness - High Tech Middle Chula Vista

Chula Vista MSCP staff along with qualified biologists from RECON conducted nature walk field trips to the Salt Creek portion of the Otay Ranch Preserve for two High Tech Middle School seventh grade classes. The field trips focused on educating the students about sensitive species in the Preserve, including coastal cactus wrens, western burrowing owls, and Otay tarplant among others. Topics of discussion during the field trips included general ecology and natural history of the native habitats and species present in the Preserve, as well as the management challenges that invasive species cause.

As part of this grant, approximately 120 cholla cuttings were transported to High Tech Middle Chula Vista and were planted in one-gallon pots by the students. The cholla cuttings will be transplanted to the Preserve in Year 3 of the project.

Future Restoration and Enhancement Tasks

In Year 2 of the restoration and enhancement program, weeds will continue to be controlled, as needed, to prevent seed set. Vegetation sampling and cactus wren population monitoring will be repeated in the spring of 2014.

Section 5.3.3 Transfer of Preserve Lands East of Otay Lakes

In 1996, the USFWS stated in a letter (dated February 22, 1996) to the primary owner and developer of Otay Ranch, The Baldwin Company, that all Preserve lands east of Otay Lakes and within the NWR boundary would be transferred directly to the USFWS. Based on this correspondence and further discussions, the USFWS/NWR agreed to accept POM-owned Preserve lands located east of Otay Lakes and the management and monitoring responsibilities associated with the lands. In addition to the USFWS/NWR, the BLM, and CDFW have also expressed an interest in assuming the management responsibilities of Otay Ranch Preserve land east of Otay Lakes from the POM. In 2013, the POM and Wildlife Agency staff met several times to negotiate the terms and conditions for transferring POM lands located east of Otay Lakes. These discussions will continue through 2014.

SECTION 6.0 - FUNDING FOR PRESERVE MANAGEMENT AND MONITORING

The funding for management and monitoring of the MSCP Preserve has been designed to be self-sustaining through the establishment of various long-term management funding sources, such as non-wasting endowments and special tax districts. By establishing these types of funding mechanisms, the costs for management and monitoring of the Preserve relies minimally upon City's general fund and/or grant monies.

The following summarizes the funding mechanisms that have been applied or will be established to ensure funding is available in order to maintain and enhance the viability of the City's Preserve.

Section 6.1 - Central City PMA

The Central City PMA encompasses the Preserve areas surrounded by the existing communities of Bonita Long Canyon, Rancho Del Rey, Terra Nova, Sunbow and EastLake. An additional 268 acres associated with Central City PMA will be acquired within the Otay River Valley, west of Heritage Road. The City is managing these areas through established financing mechanisms, including various Open Space Districts (OSDs), Landscape Lighting and Maintenance Districts (LLMDs), and Community Facilities Districts (CFDs). The Central City financing districts levy assessments or taxes on property owners in order to create a revenue source to meet open space maintenance budget needs. Currently the City is budgeting for Fiscal Year 13-14.

As discussed in Section 8.3.1.1 of the City's Subarea Plan, funding available from existing open space maintenance financing districts in the Central City does not provide for enhanced management activities (e.g. restoration/enhancement). To address these underfunded areas, the City is exploring its options to establish a Biological Enhancement Program (BEP) that could expand Preserve management programs within these existing open space districts. A variety of funding sources may be used to insure this annual funding program including, but not limited to: grants, Federal and State funding programs, funds that may be made available through the Otay Valley Regional Park JEPAs, other regional Preserve management funding sources, City General Fund revenue and/or other local funding sources.

Consistent with the City's obligation to secure funding for enhanced management activities, the City has received \$650,000 in grant funds to implement two multi-year habitat restoration programs within the Central City PMA: Coastal Cactus Wren Habitat Restoration (\$380,000 over 5-years) and Otay Tarplant Seed Propagation/Weed Control Program (\$270,000 over 3-years). Please refer to Section 5.0 for additional details regarding these grant projects.

In addition to the grant funds secured, the City is contemplating the creation of a Special Tax District or Community Facilities District that would collect funding through a levy placed on future development projects. Such a program would require future development projects within a pre-determined geographical area to annex into a Central City Preserve management district thereby creating a perpetual funding source for enhanced Priority II management tasks.

Section 6.2 North City PMA

Funding for long-term Preserve management and monitoring within the North City PMA has been established through the development of Community Facility Districts (CFDs) and endowment contributions. The following provides a brief description of the funding sources that have been developed through specific projects.

Section 6.2.1 Bella Lago

In August 2009, the developer transferred approximately 75 of the 86.5 acres of on-site upland habitat to the USFWS for inclusion into the NWR. Funding for long-term management of the 75 acres is the responsibility of USFWS. Long-term management for the remaining 11.5 acres has been secured through a \$137,500 endowment, which is currently in an interest-bearing account. The endowment was initially calculated to fund long-term management for the entire 86.5 acres of open space and, therefore, is expected to sufficiently fund long-term management of the remaining 11.5 acres of on-site Preserve lands.

Section 6.2.2 Rolling Hills Ranch

In Rolling Hills Ranch, a Communities Facilities District (CFD 11-M) was established to fund the maintenance, management, and biological monitoring program for the 214 acres of Preserve lands in accordance with the Rolling Hills Ranch ASMDs. Through CFD 11-M, a special tax is levied on property owners within Rolling Hills Ranch in order to create a perpetual funding source to meet Preserve management funding requirements. Maximum tax rates were established at the time of district formation, based upon anticipated budget needs. The maximum tax rates are adjusted annually based upon Consumer Price Index (CPI) increases.

At the beginning of FY13/14, the funding balance for CFD 11-M was approximately \$749,848. Of this amount, approximately \$50,000 is allocated to implementing long-term Priority I and Priority II tasks including general Preserve maintenance activities, biological resource management and biological resource monitoring. As noted in section 4.4, the City recently assumed long-term management responsibilities for the Rolling Hills Ranch Preserve and is currently reviewing a draft work plan for the remainder of FY13/14.

Long-term funding for the 22-acre TMA has been provided by the developer through a one-time deposit of a perpetual endowment of \$100,000, which has been secured in an interest bearing account. In 2004 when the endowment amount was established, it was anticipated that an annual return rate of 3.5% to 5% would be sufficient to cover all required maintenance, monitoring and management activities in perpetuity. Due to below average interest rates, the actual interest gained on the endowment is currently insufficient to implement long-term Priority I and Priority II Tasks. In 2011, the developer provided an additional \$24,000 to assist with the long-term maintenance of the TMA. The additional funds will provide approximately 4 years of maintenance without having to use any endowment funds.

Section 6.3 Otay Ranch PMA

In the Otay Ranch PMA, a Communities Facilities District (CFD 97-2) was created to generate revenue for the purpose of Preserve management. CFD 97-2 was established in 1998 to fund the maintenance, management and biological monitoring program for the Otay Ranch Preserve in accordance with the Otay Ranch RMP and the terms of the CFD. The CFD finances both Priority I and Priority II-type Preserve management activity, including general maintenance, biological management and biological monitoring required by the Otay Ranch RMP.

The Otay Ranch CFD levies a tax on property owners within Otay Ranch in order to create the revenue source necessary to meet Preserve management funding requirements. Like the Central City financing districts, the CFD was established to create a perpetual funding source. Maximum tax rates were established at the time of district formation, based upon anticipated budget needs. The maximum tax rates are adjusted annually based upon Consumer Price Index (CPI) increases.

At the beginning of FY13/14, the funding balance for CFD 97-2 was \$322,799; however, this amount is not inclusive of the second installment of property taxes, which are due April 2014. The approved POM budget for FY13/14 is \$468,500, which will cover the costs associated with POM administration and the adaptive management functions performed by the PSB. The POM is continuing to refine budget estimates based on projected revenues from annual tax assessments ensuring appropriate funds are available to implement required management and monitoring activities within the Otay Ranch Preserve in accordance with the RMP.

Section 6.4 Preserve Management Endowment Fund

As discussed in Section 8.3.2.4 of the City's Subarea Plan, in the North City and Otay Ranch PMAs, added funding for biological management will be derived through establishment of a Preserve Management Endowment Fund (PMEF). The PMEF will create an endowment program of approximately \$1.85 million, funded through capital improvement programs associated with the projects identified on Table 6.1. The PMEF is intended for enhanced management programs within the North City and Otay Ranch PMAs including, but not limited to, 50 acres of QCB restoration and planned responses related to changed circumstances. The identification and timing for specific management tasks will be determined through a PMEF work plan (or similar management document) which will be prepared as funding becomes available through the PMEF program.

Table 6.1: PMEF Contributions

Construction of Project	PMEF Contribution
Salt Creek Sewer (including access roads and trails)	\$1,000,000
Wolf Canyon Sewer (including access road and trail along existing dirt road)	\$500,000
Main Street	\$250,000
La Media Road	\$100,000

Construction of the Salt Creek Sewer was completed in 2003. Consistent with the City's MSCP funding obligations, \$1,000,000 was included in the project's budget for the sole purpose of creating the PMEF. However, a recent query of the endowment's available fund balance revealed that the money allocated for the PMEF remains in a non-interest bearing account and the PMEF was never formally created. MSCP staff has met with Chula Vista Engineering and Finance Department staff and has confirmed that the \$1,000,000 intended for the PMEF is still available and the endowment will be created in the upcoming FY 14/15 budget cycle. Enhanced Preserve management activities will begin as soon as the funding becomes available through the PMEF program. Construction of the Wolf Canyon Sewer, Main Street, and La Media Road projects is not known at this time.

SECTION 7.0 OUTREACH PROGRAMS

The City continues to participate in regularly scheduled MSCP working group meetings including the NCCP Southern California Partnership, SANDAG's EMP Working Group, San Diego Management and Monitoring Program (SDMMP) Working Group, South County Land Managers Working Group, US Border Patrol Taskforce Group, MSCP Annual Workshop, The Otay Ranch POM Executive/Policy Committee, and the Otay Valley River Park (OVRP) citizens advisory committee. The various MSCP group meetings consist of members from the USFWS, CDFW, Bureau of Land Management, local participating agencies, and private stakeholders. The primary objective of these meetings is to discuss and evaluate monitoring methodologies, conservation techniques, and to provide meaningful educational information to the public about the importance of habitat conservation and how it adds to their quality of life.

In addition to the public outreach efforts associated with the Salt Creek cactus wren grant project (refer to Section 5.3.2 above), the City has joined together with several other MSCP participating jurisdictions and non-governmental organizations, to develop a recovery strategy for the coastal cactus wren. As a result, an ad hoc "recovery team" has been formed to coordinate, develop, and prioritize projects designed for

the prolongation of the coastal cactus wren in San Diego County. In 2013, the City attended various working group meetings in order to identify and develop projects suitable for restoration/enhancement of existing but degraded MSS habitat, species mapping, and cactus salvaging/harvesting. The primary goal of the recovery team is to identify ways to achieve the goals and objects identified in the SDMMMP Management Strategic Plan (MSP) to reduce the potential for extirpation of coastal cactus wren in San Diego County. The City is supportive of these recovery efforts and has been successful in obtaining approximately \$580,000 in TransNet funding to promote and implement two cactus wren habitat restoration projects: the Central City Cactus Wren Habitat Restoration Grant and the Salt Creek Canyon Cactus Wren Habitat Restoration Grant. These grant projects are discussed Sections 5.1.1 and 5.3.2, respectively.

SECTION 8.0 IMPLEMENTATION ISSUES

Section 8.1 Reconciliation of HABITRAK Discrepancies

As noted in previous annual reports, the acreages calculated by CDFW using HabiTrak software differ from those calculated by the City. Based on the City's review, there are two primary factors attributing to the observed acreage discrepancies: 1) the MHPA layer used in HabiTrak does not reflect Chula Vista MSCP Boundary Adjustments that have been approved following the approval of the City's Subarea Plan in 2003; and, 2) the parcel data used in HabiTrak appears to be outdated when compared to that used by the City. Chula Vista and Wildlife Agency staff has met to discuss the mapping errors and will work collaboratively to reconcile these issues during the 2014 reporting period.

SECTION 9.0 PROPOSED 2014 TASKS

For 2014, the City will strive to implement the following tasks in order to ensure compliance with the City's MSCP Subarea Plan and Implementing Agreement are maintained:

- Coordinate with CDFW, SANDAG and SDMMMP GIS staff to reconcile inconsistencies between the City's MSCP Preserve layer/conserved lands boundaries
- Continue discussions with the Wildlife Agencies regarding land transfers east of Otay Lakes
- Continue discussions with the Wildlife Agencies regarding available mitigation options for projects located within the Central City
- Develop and implement the Central City Biological Enhancement Fund
- Continue to seek grant opportunities

SECTION 10.0 CONCLUSION

At the end of 2013 reporting period, the City has secured 72% (6,652 acres) of its targeted 9,243-acres of Preserve. A breakdown of the City's cumulative gains (gains within and outside Subarea Plan boundary plus reported pending gains) is provided in Table 10.1.

Table 10.1 Chula Vista Preserve Status (December 2013)

Chula Vista Cumulative Gains	Acreages
2012 Year-end Total (within CV SAP)	2,878
2012 Year-end Total (outside CV SAP)	2,727.32
2013 Gain (within CV SAP)	408.72
2013 Gain (outside CV SAP)	281.6
Pending Gains	356.4
Total	6652.04

Appendix “A”

2013 Summary of Habitat Losses and Gains

Summary of Habitat Losses and Gains

Plan: MSCP South San Diego County
Date Range: 1/1/2013 - 12/31/2013

Project Gain Status: Gain
Project Loss Status: Loss

DRAFT

City of Chula Vista

City of Chula Vista		Acres Inside the Habitat Preserve Planning Area					Acres Outside the Habitat Preserve				Total Acres			
		Habitat Loss		Habitat Gain			Habitat Loss		Habitat Gain		Habitat Loss		Habitat Gain	
		Current Period	Cummulative	Current Period	Cummulative	Cons. to Date %	Current Period	Cummulative	Current Period	Cummulative	Current Period	Cummulative	Current Period	Cummulative
Habitat Type	Target Cons.													
Beach	0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Saltpan	0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Southern Foredunes	0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Southern Coastal Bluff Scrub	0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Coastal Sage Scrub	2,418	0.0	1.5	285.0	1,842.2	76.2 %	0.0	57.2	0.0	5.8	0.0	58.8	285.1	1,848.0
Maritime Succulent Scrub	190	0.0	0.9	0.0	83.6	44.0 %	0.0	0.2	0.0	2.7	0.0	1.1	0.0	86.3
Chaparral	28	0.0	0.0	0.0	27.9	99.7 %	0.0	0.2	0.0	0.0	0.0	0.2	0.0	27.9
Southern Maritime Chaparral	0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Coastal Sage-Chaparral Scrub	0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grassland	896	0.0	30.9	111.7	369.0	41.2 %	0.0	192.4	0.0	10.8	0.0	223.3	111.7	379.8
Southern Coastal Salt Marsh	202	0.0	0.0	0.0	183.4	90.8 %	0.0	0.0	0.0	5.4	0.0	0.0	0.0	188.8
Freshwater Marsh	14	0.0	0.0	0.0	3.7	26.4 %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7
Riparian Forest	10	0.0	0.0	0.0	9.8	98.4 %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8
Oak Riparian Forest	0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riparian Woodland	0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Riparian Scrub	594	0.0	0.0	0.0	101.8	17.1 %	0.0	0.0	0.0	7.3	0.0	0.0	0.0	109.1
Oak Woodland	2	0.0	0.0	2.2	2.2	110.3 %	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2
Torrey Pine Forest	0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tecate Cypress Forest	0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Eucalyptus Woodland	18	0.0	0.0	1.4	14.1	78.2 %	0.0	6.3	0.0	0.1	0.0	6.3	1.4	14.1
Open Water	24	0.0	0.0	0.0	0.5	2.1 %	0.0	0.0	0.0	6.4	0.0	0.0	0.0	6.9
Disturbed Wetland	15	0.0	0.0	0.2	4.2	28.3 %	0.0	0.0	0.0	0.0	0.0	0.0	0.2	4.2
Natural Floodchannel	146	0.0	0.0	0.0	112.1	76.8 %	0.0	0.0	0.0	3.8	0.0	0.0	0.0	115.9
Shallow Bays	0	0.0	0.0	0.0	5.5		0.0	0.0	0.0	3.7	0.0	0.0	0.0	9.2
Pacific Ocean/Deep Bay	0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Disturbed Land	352	0.0	0.4	0.0	181.4	51.5 %	0.0	0.0	0.0	1.1	0.0	0.4	0.0	182.5
Agriculture	62	0.0	0.8	6.4	23.0	37.0 %	209.4	845.3	0.0	8.5	209.4	846.1	6.4	31.4

Habitat Type	Target Cons.	Acres Inside the Habitat Preserve Planning Area					Acres Outside the Habitat Preserve				Total Acres			
		Habitat Loss		Habitat Gain			Habitat Loss		Habitat Gain		Habitat Loss		Habitat Gain	
		Current Period	Cummulative	Current Period	Cummulative	Cons. to Date %	Current Period	Cummulative	Current Period	Cummulative	Current Period	Cummulative	Current Period	Cummulative
Urban/Developed	22	0.0	0.0	0.0	219.0	995.7 %	0.0	129.3	0.0	39.4	0.0	129.3	0.0	258.5
Agency Total:		0.0	34.5	407.0	3,183.5		209.4	1,231.0	0.0	94.9	209.4	1,265.5	407.0	3,278.4

Note: The Agriculture and Urban/Developed category is included to account for all land included within a project and habitat preserve planning area.